

CLAIMS:

1. A display device comprising a plurality of independently addressable pixels, wherein said pixels comprise: a first substrate; a counter-electrode; a second substrate; a stack of electrochromic-layers associated with said second substrate; an electrolyte disposed between said counter-electrode and said stack of electrochromic-layers; wherein said
5 electrochromic-layers are each independently addressable for switching operation; and said electrochromic-layers are separated from each other by layers of an electrolyte.
2. The display device of claim 1, wherein an independently addressable working electrode is arranged between the second substrate and the electrochromic layer adjacent to
10 the second substrate in the stack of electrochromic layers.
3. The display device of claim 1, wherein separate independently addressable working electrodes are associated with each respective electrochromic layer in the stack of electrochromic layers.
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4. The display device of claim 1, wherein the electrolyte separating the electrochromic layers from each other is a solid-state like electrolyte.
5. The display device of claim 4, wherein said solid-state like electrolyte is a
20 polymer electrolyte.
6. The display device of claim 1, wherein said stack of electrochromic layers comprises three monochromic electrochromic layers.
- 25 7. The display device of claim 1, wherein the counter-electrodes of each pixel of the display device are connected to form one common counter-electrode.
8. A driving method for operating a pixel of a display device according to any one of claims 1 to 7, comprising the steps of:

providing at least one power line which is selectively connectable to an electrochromic layer or to a working electrode associated with said electrochromic layer;

selectively applying to said power line a bleaching or coloring voltage;

addressing the electrochromic layer or the working electrode associated with

5 said electrochromic layer which is to be bleached or colored;

connecting said power line to said electrochromic layer or said working electrode associated with said addressed electrochromic layer;

retaining the connection of said power line to said electrochromic layer or said working electrode associated with said addressed electrochromic layer during a hold period;

10 disconnecting said power line from said electrochromic layer or said working electrode associated with said addressed electrochromic layer.

9. The method of claim 8, wherein:

15 addressing of the additional electrochromic layers or the working electrodes associated with said additional electrochromic layers is performed in a sequential manner in consecutive line periods.

10. The method of claim 8, wherein:

20 addressing of the additional electrochromic layers or the working electrodes associated with said additional electrochromic layers is performed in parallel in the same line period.